

ITS for Arterial Roadway Safety

Safety is U.S. DOT's top priority. The 2022 U.S. DOT's [National Roadway Safety Strategy](https://www.transportation.gov/NRSS) (<https://www.transportation.gov/NRSS>) outlines the safe system approach to reduce serious injuries and deaths on our Nation's highways, roads, and streets, with the goal of reaching zero roadway fatalities.

ITS technologies have been shown to **improve arterial roadway safety**. The featured benefits and lessons learned are based on ITS project evaluations contained in the ITS Databases at: www.itsknowledgeresources.its.dot.gov.

What is a Safe System Approach?

The Safe System approach is the guiding paradigm to address roadway safety adopted by U.S. DOT. It works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur.¹

Click on each example to learn more.



SAFER ROADS

Adaptive Signal Control Systems in South Carolina

A crash prediction study in South Carolina showed crash frequency decreased at 9 of 11 corridors equipped with Adaptive Signal Control Systems.



SAFER PEOPLE

Crosswalk Enhancement in Utah

High-Intensity Activated Crosswalks (HAWK) were estimated to lower the odds of driver non-compliance by 37.6 times compared to standard marked crosswalks.



Safe System Approach

SAFER VEHICLES

Connected Vehicle Technology in Florida

The Tampa Connected Vehicle Pilot showed a 9% decrease in the rate of conflicts per vehicle with Forward Collision Warnings.

POST-CRASH CARE

Advanced Automatic Collision Notification & Trauma Center Care in the United States

A NHTSA analysis estimates that combining the benefits of trauma center care and the benefits of faster crash notifications with Advanced Automatic Collision Notifications could reduce fatalities by 1.6% to 3.3% per year.



SAFER SPEEDS

Speed Cameras in New York

A New York City speed camera program reduced speeding at 91 school speed zones by 73%.



1. U.S. DOT, [What is a Safe System Approach?](https://www.transportation.gov/NRSS)